

The Textual Transmission of the *Sortes Astrampsychi*¹

RANDALL STEWART

Virtually everything has been said that can be said about who wrote the Greek book of fate known today as the *Sortes Astrampsychi*.² But several new observations need to be made about its date and a great deal remains to be written concerning the manuscript tradition that has preserved the book.

No new viable evidence about the author of the *Sortes Astrampsychi* has come to light since G. M. Browne observed that “the work is a patent forgery.”³ Although it has not previously been noted that Codex Bononiensis 3632 ascribes the *Sortes* to Leo the Wise, this ascription too is spurious and unhelpful. This witness lacks the introductory epistle, which purports to be from Astrampsychus to Ptolemy. Instead it offers only the list of days with their respective hours of inquiry, which is a feature of the medieval manuscripts of the *Sortes*, and a unique explanation of the process of consultation. At the beginning of this prefatory material is the label σοφοῦ Λέωντος ἔργων Θεσσαλονίκης (sic). The codex also offers a full-page illumination of this Leo, portraying him as a bearded man dressed in imperial robes, seated next to a small building. A superscription reads Λέων ὁ σοφώτατος. This is probably Leo the Mathematician, archbishop of Thessaloniki in the ninth century. This Leo, who was also known as Leo the Philosopher, was a noted scholar with an interest in astronomy and astrology.⁴ However, because of an accident of names, dates, offices, and talents, the Byzantine emperor Leo VI (866–912) also comes into consideration. To Leo VI, who was also known as Leo the Philosopher and Leo Sapiens, are attributed several collections of oracula.⁵ The biographical

¹ Though this article counters some of what Professor G. M. Browne has written about the *Sortes Astrampsychi*, I am indebted to Professor Browne for introducing the text to me, for explaining its structural complexities, and for providing unwavering support and encouragement as I have labored on this task. Without his kind and generous help, my work on the *Sortes* would have been impossible.

² The editio princeps is R. Hercher (ed.), *Astrampsychi Oraculorum Decades CIII*, Jahresbericht über das Königliche Joachimsthal'sche Gymnasium (Berlin 1863). This is now superseded by G. M. Browne (ed.), *Sortes Astrampsychi I: Ecdosis Prior* (Leipzig 1983) and R. Stewart (ed.), *Sortes Astrampsychi II: Ecdosis Altera* (Leipzig, forthcoming).

³ G. M. Browne, “The Origin and Date of the *Sortes Astrampsychi*,” *ICS* 1 (1976) 53–55.

⁴ *Lexikon des Mittelalters* V (Munich 1991) 1892, s.v. “Leon der Mathematiker.”

⁵ PG CVII 1121–50.

data of these two Leos were confused so often that Maraccus, in his biography of Leo VI, felt it necessary to explain that Leo VI "nunquam fuit archiepiscopus Thessalonicensis, sed solum imperator Constantinopolitanus," while the other Leo "nunquam tamen fuit imperator Constantinopolitanus, sed archiepiscopus Thessalonicensis."⁶ But this very confusion argues that the designation Θεσσαλωνίκης, while used correctly only for Leo the Mathematician, could have been used erroneously for Leo VI. Nonetheless, despite the interest of Leo VI in oracular literature and Leo the Mathematician's great learning, a book which is attested in third-century papyri could not have been composed by a man who lived in the ninth century.

Absence of credible information about the author of the *Sortes* forces one to turn to internal considerations for clues about its date. Browne, arguing that the syntax of the questions in the *Sortes* bespeaks an Egyptian origin, concluded that the work was written in the third century of our era, the only period in which the office of δεκάπρωτος (question 95: εἰ γίνομαι δεκάπρωτος;) was functional in Egypt.⁷ However, as demonstrated elsewhere, the syntax of the questions admits of a simpler explanation, one which does not bind the work to Egypt, but leaves open the question of provenance.⁸ Furthermore, the theory of a third-century Egyptian origin has been questioned by T. C. Skeat, who maintains that (1) "the late introduction of the *decemprimi* into the administration of Egypt left very little time before the appearance of actual manuscripts at Oxyrhynchus by about 300 A.D." and (2) "it is clear that the attainment of municipal and other offices was obviously thought of as desirable in Astrampsychus, and this was certainly not the case in the 3rd century."⁹

The following two pieces of evidence, which have come to light since Browne's article on the date and origin of the *Sortes*, combine to make Skeat's first objection insurmountable: (1) J. D. Thomas has argued persuasively that it was not until between 242 and 246 that the office of δεκάπρωτος was introduced into Egypt;¹⁰ (2) the verso of P. Leid. inv. 573, dated via a document on the recto to "possibly not more than five or ten years after A.D. 231," has been identified and published as a portion of the table of correspondences (see below) from the *Sortes*.¹¹ Thus, the *Sortes Astrampsychi* is attested in Egypt even before the introduction of the office

⁶ Hippolytus Maraccus, *Vita Leonis Imperatoris cognomento Philosophi*, PG CVII xx.

⁷ Browne (above, note 3) 56–58.

⁸ R. Stewart, "The Oracular EI," *GRBS* 26 (1985) 67–73.

⁹ T. C. Skeat, unpublished personal letter to G. M. Browne, dated 18 March 1982. In a subsequent letter to Browne, dated 13 April 1982, Skeat declined Browne's invitation to publish these notes and graciously added, "However, if you yourself wish to make any use of my observations, you are entirely free to do so—indeed I should feel most gratified." Browne passed this correspondence along to me and encouraged me to include it in this article.

¹⁰ J. D. Thomas, "The Introduction of Dekaprotai and Comarchs into Egypt in the Third Century A.D.," *ZPE* 19 (1975) 111–19.

¹¹ P. Lugd. Bat. XXV (Leiden 1991) no. 8, p. 17.

of δικάπρωτος into that country. As Browne once noted, "The *Sortes Astrampsychi* was a practical book; its compiler would not bother to include questions which had no immediate application."¹²

Skeat's second objection is also incontrovertible. In A.D. 200, a *boule*, or town council, was established in each nome capital by order of Septimius Severus. Of this system Alan Bowman states, "Certainly, after the middle of the third century the evidence shows that the *boulai* experienced ever-increasing difficulty in administration, particularly in finding people to fill posts."¹³ Naphtali Lewis adds, "There is now abundant evidence showing that, beginning in the latter half of the second century and increasingly thereafter, . . . the honorific offices, once so eagerly sought, began to be avoided on one pretext or another, and office-holders had sometimes to be coerced into serving."¹⁴ We can safely conclude that the *Sortes* was not composed in Egypt.

Having rejected a third-century Egyptian origin for the *Sortes Astrampsychi*, Skeat argues that the work is based on a no-longer extant first-century book of fate, a work which also gave rise to the Latin *Sortes Sangallenses*.¹⁵ His reasoning is as follows: Verbal considerations make it apparent that the *Sortes Sangallenses* and the *Sortes Astrampsychi* are related. That the Latin is odd at many points in the *Sortes Sangallenses*, but becomes clear when compared with the Greek of the *Sortes Astrampsychi*, is evidence that it, rather than the Greek of the *Sortes Astrampsychi*, is derivative. However, although the *Sortes Sangallenses* is a more extensive system than the *Sortes Astrampsychi*, its structure, inasmuch as its decades are not shuffled, is more primitive than that of the *Sortes Astrampsychi*. Since it is unlikely that "anyone producing a Latin manual based on *Astrampsychus* . . . would have gone to the trouble of *unshuffling* the groups of answers and thereby destroying one of the most effective means of producing an air of mystification," one can conclude that the *Sortes Astrampsychi* is "a sophisticated version of an earlier Greek system in which the groups of answers were not shuffled," and that this earlier system also underlies the *Sortes Sangallenses*.

Skeat goes on to argue that mention of the office of aedile in some of the answers in the *Sortes Sangallenses* indicates that the *Urtext* on which it is based was written before the end of the second century, when Alexander Severus abolished the office. Skeat, therefore, feels that this *Urtext* may be a product of the first century of our era.¹⁶ This theory, if correct, would establish the late first century as the *terminus post quem* for the *Sortes*

¹² G. M. Browne, *The Papyri of the Sortes Astrampsychi*, Beiträge zur klassischen Philologie 58 (Meisenheim am Glan 1974) 7.

¹³ A. K. Bowman, *The Town Councils of Roman Egypt* (Toronto 1971) 123.

¹⁴ N. Lewis, *Life in Egypt under Roman Rule* (Oxford 1983) 48.

¹⁵ *Sortes Sangallenses*, ed. by H. Winnefeld (Bonn 1887). See also J. Rendel Harris, *The Annotators of the Codex Bezae* (Cambridge 1901).

¹⁶ T. C. Skeat, unpublished letter, 18 March 1982 (above, note 9).

Astrampsychi. The terminus ante quem, as established by P. Lugd. Bat. XXV no. 8, is about 236. Until new evidence is available, a more precise date for the *Sortes* is impossible.

Not only are the date and provenance of the *Sortes Astrampsychi* uncertain, but the serpentine course by which the text, in what appears to be two ecdoches, has been transmitted through the centuries to our age is as mysterious at first glance as the workings of that oracular book must have been to those who consulted it for counsel and prognostication. It is, however, the very workings of the text, its structure and mechanics, that allow one to strip away much of the mystery surrounding its transmission. Consequently, although the structure of the *Sortes* has been explained elsewhere,¹⁷ it is fitting to repeat some of these details here before explaining their ramifications for the transmission.

The book begins with a list of ninety-two questions, numbered 12 through 103, such as "Am I going to sail safely?" and "Is my wife to bear a child?" In the body of the work, ten responses to each question as well as some "fake" answers, which could not be attained by the user and which were intended to make the work more baffling,¹⁸ are arranged in groups of ten (decades). Because the answers were staggered in composition—once again, to make the work more intricate than it would have been if each decade of answers contained ten responses to the same question—the answers in each decade follow in inverse order the sequence of the questions. In other words, if the first answer in a decade responds to question 20, the second will respond to question 19, the third to question 18, etc. In those decades in which an answer to question 103 occurs anywhere other than in the first line, fake answers fill the slots above that answer. Conversely, when a response to question 12 occupies any slot other than the tenth answer, fake answers fill the slots below that answer.

One other element was introduced to complicate further the workings of the text. Upon reaching the stage of composition delineated above, the author of the *Sortes* shuffled the order of the decades and added a table of correspondences to the text between the questions and the answers which shows the original, unshuffled position of the decades. The need for this table becomes apparent when one considers how the book is used.

To obtain an oracle, the inquirer chooses a question of personal interest from the list and adds to the number of that question a number from 1 to 10 chosen at random or perhaps by some kind of sortition (herein enters the notion of lots or *sortes*). He then locates this sum in the table. Next to the sum is written the number of the decade in which the user will find his response and in that decade the response with the same line number as the

¹⁷ See G. M. Browne, "The Composition of the *Sortes Astrampsychi*," *BICS* 17 (1970) 95–100.

¹⁸ Hercher, the first editor of the text (above, note 2), was baffled by the fake answers. His attempts to emend them vitiate his edition.

number between 1 and 10 chosen earlier will be his answer. For example, if the user picks question 71 and chooses 2 as his lot number, he will find, by locating number 73 ($71 + 2$) in the table, that his answer is in decade 22. This decade contains answers to questions 72–63. By adding the line number of any response in that decade to the number of the question which it answers, one arrives at the sum 73. Thus, before shuffling, decade 22 was decade 73. The table simply reverses the process of shuffling by directing the user to that decade which has a response to question 71 in the second line.

When G. M. Browne set out to produce a new critical edition of the *Sortes Astrampsychi*, he discovered that the text of one manuscript, Ambrosianus A 45 sup., ff. 59^r, 64^v–94^v (hereafter “A”), was so aberrant, both syntactically and structurally, from the text of the remaining manuscripts (hereafter designated collectively as “p”) that it seemed to preserve a separate recension or edition of the work. The differences between A and p are as follows:

1. A has 91 questions (it lacks no. 103: εἰ ὁ συνεχόμενος ἀπολύεται;) and 100 decades of answers, whereas p has 92 questions and 103 decades.
2. The fake answers in A are in random order, while in p they follow the same sequence as real answers.
3. In A, decades 36, 47, 51, 69, 80, 84, and 97 have positions in the table of correspondences different from their places in p.
4. The answers in A often differ from those in p. Also, A’s answers tend to be shorter and more succinct than those of p.
5. The Christian interpolations in A are different from those in p.¹⁹

These are not variations which can be attributed to scribal error. Rather, each text seems to be the result of purposeful composition. Browne noted further that whereas the text of P. Oxy. 1477 and another unpublished Oxyrhynchus papyrus (hereafter P. Oxy. ined.) of the *Sortes* seem to be syntactically closer to the text of p than to that of A, for P. Oxy. 2832, 2833, and 3330 the situation is reversed and that in 3330 decade 51 is unshuffled decade 74 as in A. He also discovered that portions of A, in a state which antedated the Christian interpolation, had been copied into a Byzantine book of fate preserved in Codex Barberinianus 13, ff. 38–62^v. Realizing that the variations between A and p bespeak recensional activity, since they are too extensive to be attributed to scribal error, Browne theorized that the text of A, with its shorter answers and fewer decades, was the first version and that a short time after its composition someone, probably the original compiler, rewrote the text, adding question 103 as well as three new decades (two of

¹⁹ The papyri of the *Sortes* and the fake answers in all witnesses show that at some point in the transmission of the text questions of a risqué nature were Christianized. For example, question 66 is εἰ γίνομαι ἐπίσκοπος; in A and εἰ γίνομαι κληρικός; in p, but answers to the question in an unpublished papyrus from Oxyrhynchus (P. Oxy. ined.) make it clear that the original question was εἰ καταλλάσσονται τῇ φίλῃ;

which contain only fake answers), reshuffling several decades, ordering the fakes, and lengthening the answers.²⁰

The theory seems to be a plausible explanation of the obvious differences between the two versions, but careful consideration of the evidence uncovers the following anomalies which it cannot resolve. Though A does not include question 103 (εἰ ὁ συνεχόμενος ἀπολύεται;) in the list of queries, it has five answers to the question distributed in the proper places in the decades to make them functional were the question in the list (80. 1, 28. 2, 69. 3, 63. 4, 82. 5). In three other places where a response to question 103 would stand, were the question available, we encounter fake answers to question 56, which reads εἰ ἀπολύομαι τῆς συνοχῆς; These three answers are 88. 6 and 91. 7 (ἀπολύεσαι τῆς συνοχῆς) and 92. 8 (κινδυνεύεις συνεχόμενος). With only slight emendation these answers can be transformed into responses to 103 (cf. 92. 8 in p: κινδυνεύει ὁ συνεχόμενος καὶ τελευτᾷ). If question 103 was not an original part of the text represented by A, the only explanation for the occurrence of answers to it in A is contamination with p. But if contamination were to blame, we should expect the copyists responsible to have added an answer to question 103 at 84. 9, where the ninth answer to the question would have been required, and we should not expect to find an answer to it at 97. 9, where in A it is a fake, but in p the ninth answer to the question. Furthermore, 97. 9–10 in A constitutes the only instance in that manuscript of two fake answers which respond, in reverse sequence, to questions which are consecutive in the list of queries. This whole issue is further clouded by the fact that in six of the eleven manuscripts comprising p question 103 does not occur in the list of queries even though a full complement of answers to the question is available, and in yet another one of the eleven manuscripts question 103 reads εἰ ἀπολύομαι τῆς ἐνοχῆς; (cf. question 56: εἰ ἀπολύομαι τῆς συνοχῆς;).

It is also difficult to explain why someone would produce a new edition which differed only slightly from the original and to determine the rationale behind the reshuffling of the decades. For while the addition of three decades would have necessitated some changes—especially if the compiler did not want simply to add them to the end of the table, where they would have the appearance of a spurious addition—the reshuffling was far more extensive than necessary.

I believe it can be shown that (1) the text of A derives from the text of p and was produced from a manuscript of this longer version from which the table of correspondences had been lost; (2) p represents the original structure of the text with respect to the number of questions, the number of decades, and the arrangement of the shuffled decades, with the exception of the correspondence $\alpha\delta = \pi$ and $\rho\delta = \nu\alpha$; (3) A preserves the simple sentence-

²⁰ For Browne's argument, see Browne (above, note 12) 3–14.

structure of the answers and the random ordering of fakes characteristic of the autograph; and (4) all of the papyri of the *Sortes* thus far brought to light are witnesses of the text of p before its answers were lengthened and, with few exceptions, before its fakes were set in sequence.

Even if the introductory epistle in the *Sortes Astrampsychi* did not speak as if the questions, the table, and the decades were in three different books, i.e. papyrus rolls or codices, it would not be unreasonable to suppose that these units of the text were often separated in this fashion so as to reduce the amount of searching back and forth in the book that repeated consultation would entail. If the possessor of such a tripartite book lost the section that contained the table of correspondences, he would either have to copy the table from another manuscript or discard the rest of the text as useless, unless he understood the mechanics of the *Sortes* well enough to reproduce the table from the decades.²¹

However, from a text of the longer version in which the list of questions lacked number 103 and in which the answers in the two decades of fake answers (47 and 69) were in the same sequence as real answers, while the fake answers elsewhere were in the same random configuration as that which still obtains in A, he would, by following the simplest method of restoration, produce a table having the same correspondences as the table in A and he would lose three decades in the process. In short, he would create the so-called first edition.

The three features which would be necessary in this *Vorlage* are not as chimerical as they may appear. That six of the eleven manuscripts comprising p have all of the answers to question 103, but do not include the question in the list, makes plausible the notion that the question could have been lacking in this hypothetical text.²² The fact that P. Oxy. ined. has in decade 97 (which is unshuffled 112) almost the same random arrangement of fakes as A and has in decade 69 the same answers (with the possible exception of 69. 1, of which only one letter and some traces remain) as decade 69 in p, where it is a complete fake, argue that the original text had the very arrangement of fakes described above and that A, for the most part, still preserves this arrangement, while in the text of p, a redactor has set the fakes in sequence.²³

²¹ P. Lugd. Bat. XXV no. 8 appears to preserve a makeshift copy of the table of correspondences. The table was copied onto the back of a document probably by or for someone who owned a text of the *Sortes*, but had lost his table.

²² C (Parisinus gr. 2494, ff. 243–54^v, fifteenth century), N (Neapolitanus II. C. 33, ff. 278–307^v, fifteenth century), O (Baroccianus 216, ff. 232–44, fifteenth century), P (Parisinus gr. 2424, ff. 226^v–40^v, fourteenth century), R (Rossianus 986, ff. 381–88, fifteenth century), V (Barberinianus 13, ff. 1–30, sixteenth century).

²³ That this may have been a gradual process and not the work of a single redactor is suggested by the fact that in this same papyrus decade 93 shows a sequential ordering of fakes. P. Gent inv. 85 (W. Clarysse and R. Stewart, "P. Gent inv. 85: A New Fragment of the *Sortes Astrampsychi*," *Chronique d'Égypte* 63 [1988] 309–14), dated to the third century, also shows a sequential ordering of fakes in 20. 5–10.

To restore the table on the basis of the decades, one must ascertain the unshuffled position of each decade. The easiest way to accomplish this is to determine the number of the question to which the first answer in the decade responds and to add one to that number. For example, the first answer in decade 26 is to question 84. The equation $84 + 1 = 85$ shows that what became decade 26 after shuffling was originally decade 85, containing in descending order answers to questions 84–75. The number of the question to which each answer in that decade responds plus the number of the slot which the answer occupies equals 85. A user of the text would arrive at the first response in this decade by selecting question 84 as his query and choosing 1 as his random number; he would arrive at the second answer by selecting question 83 and choosing 2 as his random number.

The owner of the defective text uses this method to determine the position of each decade in the table. He begins by listing the numbers $\iota\gamma$ through $\rho\tau\epsilon$ in columns.²⁴ Then, taking the first decade in his text and discovering that its first response is to question 68, he enters α next to $\xi\theta$ on his list. Looking at the second decade he finds that its first answer is to question 102, so he enters β next to $\rho\gamma$. He then continues this process for each decade in the text. Table 1 shows the results of his work, including the corrections he would have to make for mistaken first impressions. These corrections, as well as the other correspondences marked with superscript letters, are explained below, with the superscript letters keying the correspondences to their explanations.

a When he comes to decade 28, the restorer does not realize that the first answer is a fake. To determine what answer he saw there, we must turn to A where, as argued above, the fakes are still in their original formulation. We find there, just as our restorer must have found in his text, an answer to question 63. So he writes $\kappa\eta$ next to $\xi\delta$. But later, when he comes to decade 42, he finds that it too begins with an answer to 63. So he looks at the last answer in that decade and discovers that it responds to question 54. By adding 10 to this number he confirms that this decade, and not decade 28, is the real unshuffled decade 64. So, next to the lemma $\xi\delta$ on his list, he crosses out the $\kappa\eta$ he had written earlier and writes in $\mu\beta$. Going back to 28, he adds 10 to the number of the question answered by its last response, thereby ascertaining that that decade is unshuffled 105, and he records this on his table.

b In decade 36, he sees that the first answer is to question 75, so he records $\lambda\zeta$ next to $\omicron\varsigma$, not realizing that the answer is a fake and that decade 36 is actually unshuffled 106. This error is not corrected when he gets to decade 84, the real unshuffled 76, for the following reason: Upon finding

²⁴ This assumes that the restorer knew in advance of his restorative labors that the table began with $\iota\gamma$ instead of α and that it extended to $\rho\tau\epsilon$, but the results would not be affected by the listing of numbers which later were found to be unnecessary or by the initial omission of numbers which later had to be added.

ιγ	κ	λδ	ξη	νε	ι	ος	λς ^b	ρς	πθ
ιδ	ρζ ^h	λε	ος	νς	μθ	οζ	μγ	ρζ	οζ
ιε	μδ	λς	ν	νζ	πγ	οη	ιδ	ρη	νδ
ις	ρη	λζ	νγ	νη	ρδ	οθ	νε	ρθ	ξε
ιζ	ιθ	λη	δ	νθ	πς	π	λ	ρ	ογ
ιη	ξη ^ρ γ ^d	λθ	ρς	ξ	ξα	πα	ξδ	ρα	λβ
ιθ	οθ	μ	μ	ξα	οε	πβ	νη	ρβ	ις
κ	λε	μα	κα	ξβ	νβ	πγ	πε	ργ	β
κα	η	μβ	κγ	ξγ	ς	πδ	πς	ρδ	πε
κβ	μς	μγ	ο	ξδ	κη ^μ β ^a	πε	κς	ρε	κη
κγ	κδ	μδ	ρθ	ξε	οη	πς	ξς	ρς	ξθ ^{f,h}
κδ	κς	με	ξβ	ξς	μη	πς	ξς	ρς	ξγ
κε	οα	μς	λα	ξς	νθ	πη	θ	ρη	πβ ^g
κς	ιη	μς	λγ	ξη	ς	πθ	οβ	ρθ	πη ^g
κς	ιε	μη	ε	ξθ	α	ρ	ιγ	ρι	ρ ^α β ^g
κη	λς	μθ	με	ο	ρε	ρα	πα	ρια	ρβ ^g
κθ	νς	ν	ρ	οα	ρ	ρβ	ιβ	ριβ	πδ ^b
λ	μς ^c	να	μα	οβ	ις	ργ	νς	ριγ ^h	
λα	λη	νβ	λθ	ογ	κβ	ρδ	κθ	ριδ ^h	
λβ	λδ	νγ	ια	οδ	να ^e	ρε	κε	ριε ^h	
λγ	γ	νδ	οδ	οε	ξ				

Table 1

that decade 84 begins with an answer to question 75 and that λς has already been recorded as unshuffled decade 76, he looks to the tenth answer of decade 84 for some enlightenment. There he reads an answer to question 66, but to the original question 66, not the interpolated form which appears in the text of p. An answer to this question in P. Oxy. 3330, a papyrus which antedates the Christian interpolation, is [c. 11].η φίλη. In P. Oxy. ined., the answer to this question at 95. 4 is καταλλάσσει τῇ φίλῃ. These early witnesses suggest that the original form of question 66 was εἰ καταλλάσσομαι τῇ φίλῃ; I believe that the restorer thought it was an answer to question 102 (εἰ καταλλάσσομαι τῇ γυναικί; the question in p is corrupt)²⁵ that he saw in the tenth position of decade 84, and this led him to believe the decade was unshuffled 112. This same confusion between the original form of question 66 and question 102 is evidenced in decade 103 in p, where the sequence of responses suggests that an answer to question 102 should be in the first slot. But an interpolator, thinking the response was to

²⁵ In p, the question is εἰ ἀπαλλάσσομαι τῇ φίλῃ; In all witnesses of the *Sortes Astrampsychi*, scribal error results in the interchange of ἀπαλλάσσομαι and καταλλάσσομαι.

question 66, changed the answer to οὐ καθίστασαι κληρικός, which corresponds to the interpolated form of question 66.

^c When he comes to decade 47, he sees an answer to question 29 in the first position, so he writes μζ next to λ on his table without realizing that the decade is a complete fake. This correspondence is not replaced by that which originally stood in the text for reasons which will be explained below.

^d Decade 63 is recorded as unshuffled 18, because a fake answer to 17 stood in its first slot (as in A), but it is later ousted when the restorer arrives at decade 93 and, by checking the final answers in each decade, discovers that 93 is unshuffled 18 and 63 is unshuffled 107.

^e The fact that in the text of A the correspondence οδ = π and ρδ = να is transposed cannot be laid to the charge of the restorer. If we assume that this correspondence is original, there is no apparent reason for its reversal in A. But if we start with the hypothesis that οδ = να and ρδ = π, as we find it in A and P. Oxy. 3330, is the original correspondence, its transposition in the text of p admits of a simple explanation and, in turn, helps to account for the anomalous situation that in p, 51. 1 is an answer to question 73 (corrected in R to an answer to question 103),²⁶ despite the demand of the text for an answer to 103 in this position. In A, where decade 51 is unshuffled 74, the answer to 73 is necessary in this position. The explanation is that an early copyist confused οδ and ρδ while copying the table and wrote π next to οδ rather than next to ρδ. In some hands ρ and ο have a similar appearance and an arrangement of the table with οδ and ρδ at the head of adjacent columns may have precipitated the error. Upon discovering his mistake, the copyist went ahead and wrote να next to ρδ and made a note to himself in the appropriate places in his *Vorlage* to copy decade 80 for 51 and 51 for 80. Then when he arrived at decade 51 in his copying, he saw his note and flipped ahead to decade 80. But because his list of questions did not contain question 103, he viewed the first answer in decade 80, which is a response to question 103, not only as an unobtainable fake, but also as a fake that corresponded to no question in the text. Consequently he copied the first answer of decade 51 in his *Vorlage* as the fake answer at 51. 1 in his new copy and then copied the remaining nine answers from 80. 2–10. When he reached decade 80 in his copying, he turned back to decade 51 in his *Vorlage* and copied it as his decade 80. That question 103 is missing from so many manuscripts of the text helps explain why the loss of an answer to 103 at 51. 1 was not noticed and remedied; without the question in the list of queries, no user would ever arrive at 51. 1 by looking for an answer to question 103. Thus, the correspondence οδ = να and ρδ = π, which we find in A, is original and the text from which A was derived still had this original version, though the

²⁶ For identification of R, see above, note 22.

transposition had probably already been made in many manuscripts (see below).

^f When the restorer came to decade 69, he saw, I believe, an answer to question 101 in the first position, and not the answer to 12, which heads the decade in p. As shown above, the new Oxyrhynchus papyrus argues that in decades where a series of real answers begins within the decade, a redactor has rewritten the fakes in such a way that the real answer to question 103 is preceded by a fake answer to 12, which is preceded by a fake answer to 13 and so on until the decade is filled. It is likely that the pattern as it appears in p for decade 69 is not a mere coincidence, but is also the work of this redactor, even though the answers are all fakes.

In decade 69 in A, the series of answers beginning with 103 occupies slots 3–10 and is preceded by an answer to 101, which is preceded by another answer to 103. Thus, the tenth answer is to question 96 and not to 95 as in the new papyrus²⁷ and in p. If we assume that the original sequence of answers was 101, 103, 102–95, the new arrangement of the answers in A and the identification of the decade as unshuffled 106 can be explained along the following lines: The restorer sees 101 as the first answer, but he has already identified decade 16 as unshuffled 102, so he looks at the final answer in 69 and finds an answer to 95. He adds 10 to this number, but then discovers that decade 28 has already proved to be unshuffled 105. So he makes a note next to the table that decade 69 remains to be assigned and he continues. When he has gone through all of the decades, he observes that he has not found a decade which could be the unshuffled 106, since, as indicated above, decade 36, the original unshuffled 106, was identified as unshuffled 76 because its first answer, a fake, was to 75. This correspondence was not changed when the restorer came upon decade 84, the original 76, because, as shown above, the final question of 84 was misidentified. So he records 69 as unshuffled 106 and, dropping the answers down one slot so as to make the decade functional in that position (and thereby losing the answer to 95), he adds as a fake answer to the head of the decade another response to question 103.

^g On the basis of the fakes which head decades 82, 88, 91, and 92, these decades would have been identified as unshuffled 55, 15, 32, and 88 respectively, but by the time the restorer reached these late decades, the positions they would have taken had already been filled by the proper attributions. Upon discovering that these slots were already taken, the

²⁷ The reading of the new papyrus at 69. 1 is uncertain as only one letter, an upsilon, can be read with certainty. I read the line as [οὐ] πλεῖς νῦν. However, an answer to question 12 in this place in this papyrus does not establish that this was the original answer since, as already indicated (above, note 23), the ordering of the fakes in some decades had taken place by the time this papyrus was copied. Even if this answer to 12 is original, the identification of decade 69 as unshuffled 106 would have taken place much as described above, since the restorer would already have identified two other decades as unshuffled decades 13 and 105, the two obvious possibilities for 69, by the time he arrived at decade 69 in his examination.

restorer, by checking the last question in each of these decades, was able to identify them correctly.

^h When he examines decade 97, the restorer finds that the first answer is a response to question 13 (as in P. Oxy. ined.) and he records the decade as unshuffled 14. From this position decade 97 is not dislodged by decade 101, the real unshuffled 14, because when the restorer gets to decades 101, 102, and 103, he sees that all of the spaces on his table through 112 are already filled except for 106 and that decade 69 is still unattributed. At this point he makes decade 69 the unshuffled 106 as described above. Simple mathematics tells him that he has no need for the three remaining decades because the last question on his list is number 102 and since $102 + 10$ equals 112, he need have no number higher than 112 on his table. So he simply leaves the extra three decades off the table and crosses them out in his text.

The result of this process is a text of the *Sortes* which has 100 decades shuffled in the same manner as indicated by the table in A. To make the new text fully operational, 97. 2 was changed to an answer for question 12 and 36. 2–10 had to be rewritten with answers to questions 74–66, but these changes may have been made later as use of the new text revealed its few deficiencies. Though use of the book did not require it, 84. 2–9 were rewritten with a random assortment of fakes, with the result that the first answer, once a real response to 75, now appears to be just one of the random fakes.

This explanation illuminates not only the factors which gave rise to the production of a second edition so similar to the first, but also the causes for each of the structural differences between the two editions. The implications of this explanation for the establishment of a critical edition are great. Once it has been demonstrated that the text of A was derived from the text of p by means of a reshuffling of a few decades and that $\alpha\delta = \nu\alpha$ and $\rho\delta = \pi$ is the original correspondence, it is evident that none of the papyri can shown to be a carrier of the text of A. The verbal criteria used to identify P. Oxy. 2832, 2833, and 3330 as witnesses of the shorter version are not valid, since all extant witnesses ultimately derive from just one autograph. The similarity in verbal structure between the papyri and A may attest to the syntactic fidelity of A to the autograph, but it cannot be interpreted as proving the existence of carriers of the shorter version of the text as early as the fourth century. For a papyrus to lay claim to such a role, it would have to show not just verbal, but also structural, similarity with A. Though, as noted above, P. Oxy. 3330 might lay claim to such structural similarity in that it shares with A the correspondence $\alpha\delta = \nu\alpha$ and $\rho\delta = \pi$, this has been shown to be a feature of the autograph and hence of the earliest manuscripts of the text represented by p.

However, the fact that A has the original correspondence, and not the reversal of it which is found in p, contributes to the evidence that A preserves an early form of the text and that its archetype was produced at an

early point in the transmission. The portion of the table of correspondences preserved in P. Lugd. Bat. XXV no. 8 has the altered correspondence and is evidence that the alteration was made no later than about A.D. 236. The shorter version represented by A need not have been produced before this date in order to have the original form, but it must have come not much later, for p shows that the altered form became the standard.

It is still correct to refer to A as the first edition, since verbally it is closer to the original than is p, but it must be remembered that p, though soon to be edited and published as the second edition, preserves the original structure of the text except for the order of the fake answers and the correspondence $\phi\delta = \pi$ and $\rho\delta = \nu\alpha$. Inasmuch as A and p are witnesses of the same archetype, they can be used together, along with the papyri, to establish a hypothetical reconstruction of this archetype.

University of Utah